**Chapter Five Case 5.2**

1)

The following factors make the shift potentially radical:

1. The total transition of using modern CAD technology for R&D and PLM technology across the entire process from design to prototype to development.

2. The method completely changed from outsourcing the prototype parts to in-house construction.

3. The whole design to shipping process's lead times were drastically shortened from 28 months to 12–14 months.

2)

The present extremely difficult design and prototype process, which requires longer lead times and still doesn't guarantee a success and necessitates the complete redesign of the product, is the main element in Santa Cruz Bicycles' successful process overhaul.

3)

The external elements that came into play so that Santa Cruz Bicycles could make the improvements it made are -

1. The search for innovative bicycle designs by bike enthusiasts and riders.

2. The mountain bike technology market opportunity and the existing dearth of items that excite riders

4)

The following factors explain why the tale is more about change management than software implementation:

1. It required significant adjustments to the design, prototype, and development of vehicles, where technology serves just as a facilitator.

2. It caused a significant decrease in process lead times and other important indicators.

3. There is a total transformation in the process where technology is applied, not just a technological application to the current process.

The lessons acquired by Santa Cruz Bicycles following the failure of its initial prototypes were crucial to the company's successful process design. Following the failure, management became aware that the product development was taking a lot longer than anticipated. The management of the product development process lacked a systemic approach. The company subsequently turned to the PLM (product life cycle management) program, which provided their business strategy structure and addressed the shortcomings of the prior method.

The training of the company's personnel to inform them of the capabilities and applications of the PLM software was one of the external aspects that eased the transformation process. Any change is only successful if the workforce has accepted it and helped with the shift. The design team's training in particular was crucial for the project's effective change management. Outside variables that aided the transition process at Santa Cruz were the requirement for an internal master frame builder and a machine to make prototypes.

In my opinion, I would have handled the matter similarly if I were the CEO of this firm. The only thing I may have done differently is to address people's concerns before the change was started, ensuring that the entire company was on board with the change process.